Registration Details

Professionals:	Rs. 5000/-
University Students:	Rs. 3000/-

Fee includes course material, certificate, lunch and refreshments. Paid accommodation may be provided on request to outside participants in students hostel subject to availability of rooms. PIEAS will not pay any TA/DA.

Important Dates

Registration Deadline:	Jan 10, 2020
Confirmation by fax/email:	Jan 31, 2020
Workshop Dates:	Feb 11–13, 2020

Contact Us

Mr. Aitazaz Hassan(Focal Person)
Phone: +92 51 9248611-20 (Ext: 3340)
Fax: +92 51 9248600
Email: *aitazaz@pieas.edu.pk*

Dr. Nadeem Shaukat (Coordinator)
Phone: +92 51 9248611-20 (Ext: 3350)
Email: *drnadeem_shaukat@pieas.edu.pk*

Mr. M. Danyal Qasim(Coordinator)
Phone: +92 51 9248611-20 (Ext: 3480)
Email: *danyalqasim@pieas.edu.pk*

Resource Persons

Dr. Emad Uddin (NUST)
Head, Department of Mechanical Engineering, SMME, NUST

Dr. Kashif Rashid(PAEC)
PhD (Chemical Engineering)
Korea Institute of Energy Research, Seoul Korea

Dr. Ajmal Shah(PIEAS)
PhD (Mechanical Engineering)
PIEAS, Pakistan

Mr. Ammar Ahmed(PIEAS)
MS (Nuclear Engineering),
PIEAS, Pakistan

Mr. Aitazaz Hassan (PIEAS)
MS (Process Engineering),
PIEAS, Pakistan

Learning Outcomes

The workshop will involve extensive hands on sessions. On successful completion, the participant will able to:

1. Understand basic and advanced concepts of CFD techniques.
2. Apply computational tools available under ANSYS environment e.g. FLUENT, CFX, ICEM etc.
3. Solve simple and complex engineering problems.
4. Analyze the solutions of various problems.
5. Visualize various parameters for better interpretation of the results.

Hands on Workshop on Computational Fluid Dynamics

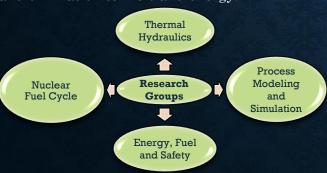## February 11 – 13, 2020

PIEAS

Organized by

Department of Chemical Engineering (DChE)
&
Center for Mathematical Sciences (CMS)

Institute Profile

Pakistan Institute of Engineering and Applied Sciences (PIEAS), Islamabad is a federal public sector university. PIEAS has around 140 highly qualified fulltime faculty members in the diverse fields of physical sciences, engineering and medicine. Seventy percent of them have PhD degrees from the reputed institutions of USA, Canada, UK, Germany, France, China, Japan, Austria and Australia. PIEAS has been ranked as No. 1 Engineering and Technology University in HEC Rankings of 2006, 2012 and 2013. and QS World Ranking 2018 and 2019.

Department of Chemical Engineering

Department of Chemical Engineering (DChE) was founded in 2011 after the bifurcation of Department of Chemical & Materials Engineering (DCME). DChE is actively involved in academic as well as industrial research in collaboration with several organizations, both national and international. Diverse research groups at the department range from modeling and simulation to fuels and energy.

- Thermal Hydraulics
- Nuclear Fuel Cycle
- **Research Groups**
- Process Modeling and Simulation
- Energy, Fuel and Safety

Topics to be Covered

- Overview of finite volume method used in CFD   (Dr. Ajmal Shah)
- Pressure Drop Calculations
                        (Mr. Aitazaz Hassan)
- Heat transfer calculations
                        (Dr. Kashif Rashid)
- User Defined Functions
                        (Mr. Ammar Ahmed)
- Fluid Structure Interaction
                        (Dr. Emad Uddin)

Who Should Attend?

The topics being covered in this workshop make this relevant to those having background knowledge of chemical engineering, mechanical engineering, nuclear engineering and physics. Technical level of workshop:

☐ Beginner   ☐ Intermediate   ☐ Advanced

Registration

Completed registration form along with the bank draft/pay order in favor of "Director (Finance), PIEAS" should be submitted to the workshop coordinator before January 10, 2020. Confirmation of participation will be provided by January 31, 2020 through email only.

Hands on Workshop on Computational Fluid Dynamics (Feb 11-13, 2020)

Registration Form

Name: _____

Designation: _____

Category: Participant ☐   Student ☐

Previous knowledge of CFD: _____

Institution: _____

Address: _____

_____

Contact: _____

Email: _____

Accommodation Required: Yes / No
(Accommodation will be provided in university hostels)

Registration Payment

☐ Cash   ☐ Invoice

☐ Bank Draft / Pay Order

Bank Draft/Pay Order in favor of Director (Finance), PIEAS

Payment Details:

Draft No. _____ Amount _____

Bank: _____

Signature of Participant   Seal of Head